

MARKED VERSION OF AMENDED CLAIMS - OZ 51241

7. (amended) A nucleic acid sequence encoding a monooxygenase as claimed in [any of the preceding claims] claim 1 and the complementary nucleic acid sequence thereof.
12. (amended) A process for the enzymatic production of terminally or subterminally hydroxylated aliphatic carboxylic acids, which comprises
- a1) culturing a recombinant microorganism [as claimed in claim 10 or 11 according to the invention] which has been transformed with a vector which encompasses an expression construct comprising, under the genetic control of regulatory nucleic acid sequences, a sequence which encompasses a nucleic acid sequence encoding the monooxygenase of claim 1 in the presence of a culture medium which contains at least one hydroxylatable carboxylic acid or at least one hydroxylatable carboxylic acid derivative; or
 - a2) incubating a reaction medium containing at least one hydroxylatable carboxylic acid or at least one hydroxylatable carboxylic acid derivative with an enzyme as claimed in [any of claims] claim 1 [to 6], and
 - b) isolating the resulting hydroxylated product from the medium.
14. A method as claimed in claim 13, wherein the hydroxylatable carboxylic acid is a C₈-C₁₂-monocarboxylic acid or a derivative thereof and the monooxygenase used [is a mutant as claimed in claim 5] comprises at least one of the following amino acid substitution patterns:

MARKED VERSION OF AMENDED CLAIMS - OZ 51241

- a) F87V;
- b) F87A L188K;
- c) F87V L188K;
- d) F87A L188K A74G;
- e) F87V L188K A74G;
- f) F87A L188K A74G R47F;
- g) F87V L188K A74G R47F;
- h) F87A L188K A74G R47F V26T; or
- i) F87V L188K A74G R47F V26T.

16. (amended) A method as claimed in [any of claims] claim 12 [to 15], wherein the reaction is carried out in the presence of an electron donor or a reduction equivalent.